

USPTO Customer No. 25280

Case 9292

REMARKS**Rejection under 35 USC 103**

Claims 1 – 8 are rejected under 35 USC 103(a) as being unpatentable over Li et al. (US Patent 6,686,301).

The Examiner bases his rejection of the Claims on the following argument:

"The cited reference teaches the basic claimed invention including a composite article comprising a silicon rubber matrix, reinforced with polyaramid textile bonded thereto by organosilane. It is submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize acryloxy organosilane bonding composition in the absence of unexpected results."

The Li patent discloses a combination of silane compounds (e.g., amine-functional silanes and organo-functional silanes) for promotion of adhesion between a textile and rubber. The amine-functional silane compound taught by Lie et al. is not the same as the epoxy compound contemplated by Applicants. Accordingly, Li et al. do not teach or suggest the use of an epoxy pre-treatment, or the use of plasma, to enhance the activation of the polyaramid and, therefore, enhance the bonding between the textile and the silicone rubber.

Applicant's invention includes the limitation that the polyaramid is activated with an epoxy compound. This activation enhances the bonding between the polyaramid textile and the silicone rubber matrix. By applying a plasma treatment to the epoxy-activated polyaramid, the bonding is further enhanced.

USPTO Customer No. 25280

Case 9292

The feature of epoxy activation is not taught by the Li reference. Because the reference does not teach all of the limitations of Applicant's claims, Applicant submits that the rejection of Claims 1-8 is improper and respectfully requests that it be withdrawn.

Claims 9 – 15 are rejected under 35 USC 103(a) as being unpatentable over Li et al. (US Patent 6,686,301).

The Examiner's argument is essentially as follows:

"The cited reference teaches the claimed invention including a process for making reinforced silicone rubber article by applying an epoxy to a textile material, dipping same into an organosilane dip, and bonding the resulting textile to silicon rubber. Concerning claims 12 and 13, the reference teaches similar activation methods. Concerning claim 14, the reference teaches the claimed limitations. Concerning claim 15, the reference discloses the claimed article limitation throughout its body. Concerning claims 10 and 11, the reference teaches similar dipping."

Applicant's Claim 9 requires the activation of the polyaramid textile with an epoxy compound (step "b") before the textile is dipped into an organosilane dip. Contrary to the Examiner's interpretation of the Li et al. patent, Applicant does not find a teaching of epoxy pre-treatment in the reference. Li et al. teaches only a combination of silane compounds.

Regarding claims 12, 13, and 14, Applicant can find no mention of plasma activation in the Li et al. reference. The reference does not disclose plasma activation, the use of an air plasma, or

USPTO Customer No. 25280

Case 9292

the inclusion of water as an aerosol within the plasma. Accordingly, Applicant fails to understand how such rejection based on this reference can be maintained.

Because the reference does not disclose all of the limitations of Applicant's claims, Applicant submits that the rejection of Claims 9 – 15 is improper and respectfully requests that it be withdrawn.

USPTO Customer No. 25280

Case 9292

CONCLUSION

For the reasons set forth above, it is respectfully submitted that the rejections should be withdrawn and that all claims now stand in condition for allowance.

Should any issues remain after consideration of this Amendment and accompanying Remarks, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be promptly and satisfactorily resolved.

This response is accompanied by a Petition for Extension of Time (and duplicate thereof). In the event that there are additional fees associated with the submission of these papers (including extension of time fees), authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

Respectfully submitted,



Charlotte C. Wilson
Agent for Applicant
Registration No. 45,224
Tel. (864) 503-2194
Fax (864) 503-1999

Date: February 22, 2005

Legal Department
Milliken & Company, M-495
920 Milliken Road
Post Office Box 1926
Spartanburg, SC 29304